CLAIMS

1. A surgical apparatus for forming a hole in a tissue in a patient, comprising:

a first elongate member comprising a longitudinal axis; and

at least one flexible member comprising a first end and a second end, the second end of said at least one flexible member free and the first end of said at least one flexible member fixed to the first elongate member, said at least one flexible member movable between a first contracted position and a second extended position, wherein in said first contracted position said at least one flexible member substantially parallels the longitudinal axis of said first elongate member, and wherein in said second extended position said at least one flexible member is substantially planar, said plane defining a plurality of axes lying in the plane, and said plurality of axes being non-parallel to said longitudinal axis of said first elongate member, wherein said at least one flexible member is sized and shaped for contact with a first side of a tissue in a patient when said at least one flexible member is in said second extended position.

2. The apparatus of claim 1 wherein said at least one flexible member comprises a wire loop.

3. The apparatus of claim 1 wherein said at least one flexible member comprises a section for stiffening said at least one flexible member.

4. The apparatus of claim 1, wherein in said second extended position at least one of said plurality of axes defines an angle between about 0 degrees and about 180 degrees relative to the longitudinal axis of said elongate member.

5. The apparatus of claim 1, wherein said at least one flexible member limits movement of the tissue when said at least one flexible member is in said second position.

6. The apparatus of claim 5 further comprising a cutting member.

7. The apparatus of claim 6, wherein the cutting member is axially disposed within a first lumen of the first elongate member.

8. The apparatus of claim 6, wherein the cutting member comprises a needle.

9. The apparatus of claim 1 further comprising an occlusion device.

10. The apparatus of claim 9, wherein the occlusion device is selected from the group consisting of a septal occluder, suture, staple, and adhesive.

11. The apparatus of claim 1 further comprising an apparatus for joining tissue.

12. The apparatus of claim 11, wherein the tissue joining apparatus is a tissue welding apparatus.

13. The apparatus of claim 1 further comprising a second elongate member comprising a first lumen and wherein said first elongate member is for axially moving the at least one flexible member substantially co-linearly with said first lumen of said second elongate member.

14. The apparatus of claim 1, wherein the plurality of axes are non-parallel to said longitudinal axis of said first elongate member by being biased relative to said first elongate member.

15. A surgical apparatus for forming a hole in a tissue in a patient, comprising:

a first elongate member comprising at least a first lumen and a longitudinal axis; and

a plurality of flexible members each comprising a first end and a second end, the second end of each flexible member free and the first end of each flexible member fixed relative to each other, each flexible member movable between a first contracted position and a second extended position, wherein in said first contracted position each flexible member substantially parallels the longitudinal axis of said first elongate member, and wherein in said second extended position said plurality of flexible members are substantially planar, said plane defining a plurality of axes lying in the plane, said plurality of axes being non-parallel to said longitudinal axis of said first elongate member, wherein at least one of said plurality of flexible members is in contact with at

least a first surface of a tissue in a patient when said at least one flexible member is in said second extended position.

16. The apparatus of claim 15, wherein at least one of said flexible members in said second extended position comprises a shape selected from the group consisting of polygonal, circular, and ellipsoidal.

17. The apparatus of claim 15, wherein at least one of said plurality of flexible members is in contact with a second surface of said tissue in a patient when said flexible member is in said second extended position.

18. The apparatus of claim 15 wherein at least one said plurality of flexible members comprises a wire loop.

19. The apparatus of claim 15 wherein at least one of said plurality of flexible members comprises a section for stiffening the at least one flexible member.

20. The apparatus of claim 15, wherein in said second extended position at least one of said plurality of axes defines an angle between about 0 degrees and about 180 degrees relative to the longitudinal axis of said elongate member.

21. The apparatus of claim 15, wherein at least one of said plurality of flexible members limits movement of the tissue when the at least one flexible member is in said second position.

22. The apparatus of claim 21 further comprising a cutting member.

23. The apparatus of claim 22, wherein the cutting member is axially disposed within the first lumen.

24. The apparatus of claim 22, wherein the cutting member comprises a needle.

25. The apparatus of claim 15 further comprising an occlusion device.

26. The apparatus of claim 25, wherein the occlusion device is selected from the group consisting of a septal occluder, suture, staple, and adhesive.

27. The apparatus of claim 15 further comprising an apparatus for joining tissue.

28. The apparatus of claim 27, wherein the tissue joining apparatus is a tissue welding apparatus.

29. The apparatus of claim 15 further comprising a second elongate member coupled to at least one flexible member for axially moving the at least one flexible member substantially co-linearly with the first lumen.

30. The apparatus of claim 15, wherein the plurality of axes are non-parallel to said longitudinal axis of said first elongate member by being biased relative to said first elongate member.

31. A method for stabilizing a tissue in a patient, comprising the steps of:

placing a first flexible member in contact with a first side of a tissue in a patient;

placing a second flexible member in contact with a second side of said tissue in the patient; and

applying pressure with at least one of said first and second flexible members to said tissue in the patient.

32. The method of claim 31 further comprising the step of providing a cutting member for forming a hole in said tissue.

33. The method of claim 32 further comprising the step of providing an occlusion device for occluding said hole in said tissue.

34. The method of claim 33, wherein the occlusion device is selected from the group consisting of a septal occluder, suture, staple, and adhesive.

35. The method of claim 32 further comprising an apparatus for joining tissue.

36. The method of claim 35, wherein the tissue joining apparatus is a tissue welding apparatus.

37. A method for stabilizing a tissue in a patient, comprising the steps of:

extending a plurality of flexible members from a first lumen of a first elongate member;

placing at least one of said plurality of flexible members in contact with at least a first surface of a tissue in a patient; and

applying pressure with said at least one of said plurality of flexible members to said tissue in the patient.

38. The method of claim 37 further comprising the step of providing a cutting member for forming a hole in said tissue.

39. The method of claim 38 further comprising the step of providing an occlusion device for occluding said hole in said tissue.

40. The method of claim 39, wherein the occlusion device is selected from the group consisting of a septal occluder, suture, staple, and adhesive.

41. The method of claim 38 further comprising an apparatus for joining tissue.

42. The method of claim 41, wherein the tissue joining apparatus is a tissue welding apparatus.

43. A surgical apparatus for producing a hole in a tissue in a patient, comprising:

a catheter comprising a first lumen comprising an opening;

a delivery member axially movable within the first lumen of the catheter, the delivery member comprising a first distal end extending from the catheter and a second lumen comprising an opening;

a cutting member axially movable within the second lumen of the delivery member, the cutting member comprising a second distal end extending from the delivery member and a third lumen comprising an opening.

44. The apparatus of claim 43 further comprising a guidewire axially movable within the third lumen of the cutting member, comprising a third distal end extending from the cutting member.

45. The apparatus of claim 43 further comprising a flexible member comprising at least a first free end and a second free end, said at least first free end and second free end each capable of undergoing a first articulation and a second articulation.

46. The apparatus of claim 45 further comprising a second elongate member coupled to the flexible member for axially moving the flexible member substantially co-linearly with the first lumen.

47. The apparatus of claim 43, wherein the cutting member comprises a needle.

48. The apparatus of claim 43 further comprising an occlusion device.

49. The apparatus of claim 48, wherein the occlusion device is selected from the group consisting of a septal occluder, suture, staple, and adhesive.

50. The apparatus of claim 43 further comprising an apparatus for joining tissue.

51. The apparatus of claim 35, wherein the tissue joining apparatus is a tissue welding apparatus.

52. A surgical apparatus for producing a hole in a tissue in a patient, comprising:

an elongate member comprising a first lumen having an opening; and

a coil member having a first portion and a second portion and axially movable within the lumen of the elongate member, the coil member sized and shaped for being gradually transferred out of the opening in the elongate member to position said first portion of said coil member adjacent a first side of a tissue in a patient, and said second portion of said coil member adjacent a second side of said tissue in a patient.

53. The apparatus of claim 52 further comprising a cutting member axially movable within the lumen of the elongate member, wherein the cutting member comprises a distal end extending from the elongate member.

54. The apparatus of claim 53, wherein the cutting member comprises a needle.

55. The apparatus of claim 52 further comprising a second elongate member coupled to the coil member for axially moving the at least one flexible member substantially co-linearly with the first lumen.

56. The apparatus of claim 52 further comprising an occlusion device.

57. The apparatus of claim 56, wherein the occlusion device is selected from the group consisting of a septal occluder, suture, staple, and adhesive.

58. The apparatus of claim 52 further comprising an apparatus for joining tissue.

59. The apparatus of claim 58, wherein the tissue joining apparatus is a tissue welding apparatus.